The effect of lamotrigine in monotherapy on photo and pattern sensitivity in people with epilepsy–a clinical study

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The full effects of lamotrigine on photo and pattern sensitivity have never been fully studied, although there is some small indication in the literature of a possible beneficial effect. It is the policy of Birmingham Brainwave to substitute lamotrigine for valproate in young women who wish to become pregnant, who have primary generalized epilepsy: we use it as first-line monotherapy in young women who have developed this condition because of the known effects of vaproate on the foetus and its possible effect on ovarian function. Opportunity was therefore taken to measure the effect of lamotrigine on photo and pattern sensitivity in such patients. Pattern and photo sensitivity was measured using the standard Aston protocol in patients who were either having lamotrigine substituted and valproate withdrawn or in lamotrigine monotherapy patients, without the interpreter of the record being aware of the clinical state of the patient. In the same way the clinician responsible for adjusting the dose of lamotrigine and withdrawing valproate was unaware of the neurophysiological findings. Analysis of the data in nine patients who have completed clinical assessment shows that except in one patient lamotrigine was efficacious in controlling photo and pattern sensitivity: this effect is almost certainly dose dependent. The dose needed to produce complete control over photo and pattern sensitivity may be (as is the case with sodium valproate) slightly higher than the dose needed to obtain clinical control of seizures. We suggest that a formal trial of lamotrigine is carried out in patients with photo and pattern sensitivity, which still presents difficulties for some young people with primary generalized epilepsy.

A register in the UK of pregnancies exposed to the new anti-epileptic drugs

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The teratogenic potential of the older anti-epileptic drugs (AEDs) is well established. The situation for the newer AEDs in humans, however, is unknown. Recognizing the problems with current registers, including their generally retrospective nature, their concern mainly with abnormal outcomes and the low levels of reports they receive, we have established a register, in conjunction with the British Neurological Surveillance Unit (BNSU). The BNSU is a central reporting centre for rare neurological conditions, to which all pregnancies occurring on the new AEDs can be reported. One-hundred-and-thirty-one cases have been identified in the 15 months since data collection was started in January 1996, almost two-thirds of these being prospectively reported. We have, therefore, established what potentially appears to be an effective method of obtaining the information required to determine the relative safety of the new AEDs in pregnancy. We recognize, however, that in the UK a large number of pregnancies are occurring on these new drugs which are not being reported for follow-up. It is therefore essential that we increase the awareness within the UK of all those dealing with patients with epilepsy as to the existence, aims and potential benefits of the register.

An audit of topiramate use in York

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Topiramate is a new effective anti-epileptic drug but there has been a high incidence of adverse events leading to cessation of therapy in many patients. This retrospective study identified 94 patients who have been treated with topiramate in York and looks at the effectiveness and the adverse effects of topiramate.

Twenty-two (24%) patients treated with topiramate had a greater than 50% reduction in seizure frequency. Three of these 22 patients were seizure free for at least 3 months. Currently 45 (48%) patients are continuing on topiramate. Forty-nine (52%) patients have withdrawn from therapy, 24 (26%) for lack of efficacy and 39 (41%) due to side effects.

The commonest encountered side effects were psychiatric. Seven patients were admitted to hospital as a result of side effects from topiramate, all with psychotic symptoms. Eleven patients developed hallucinations and delusions, including severe psychoses in two patients. Another commonly reported side effect (31%) was 'abnormal thinking' consisting of mental slowing in association with word-finding difficulties.

The audit confirmed that topiramate is an effective anti-epileptic drug, but there is a high incidence of psychiatric side effects in particular.